

H U N G

✓ Effect of isolated cerebral hypoxia and hypercapnia on sodium excretion. M. Poldi, A. G. B. Kovách, and L. Takács (Budapest Med. Univ.). *Nature* 176, 120(1956).  
 Hypoxia was induced in dogs under chloralose anesthesia by inhalation of 10% O in N. It caused an av. decrease in Na excretion of 16% in 14 of 15 animals. In some cases the decrease occurred with unchanged Na filtration. Decreased Na excretion was also found in animals with isolated head circulation maintained by a Dale-Shuster pump, and when these same animals were subjected to hypercapnia or stagnating hypoxia. In parabiosis, Na excretion was lowered when the head of the acceptor animal was perfused with donor blood at 100% O satn., and hypoxia was induced in the body by inhalation of a mixt. of O and N with reduced O content. It is believed that there are receptors sensitive to hypoxia both in the brain and in the remainder of the body.  
 P. N. Lefkowitz

KOVACH, Arisztid; TAKACS, Lajos; ROHEIM, Pal

Carbohydrate metabolism in shock; IV. Data on the decrease  
mechanism of glycogen phosphorylation. Kiserletes orvostud.  
8 no.2:201-204 March 56.

1. Budapesti Orvost. Egyetem Elettani Intezete.

(SHOCK, exper.

eff. on glycogen phosphorylation in muscle extracts  
& homogenates in rats. (Hun))

(GLYCOGEN, metab.

muscle, eff. of exper. shock on phosphorylation in  
extracts & homogenates in rats. (Hun))

(MUSCLES, metab.

glycogen, eff. of exper. shock on phosphorylation in  
extracts & homogenates in rats. (Hun))

(PHOSPHORYLASES, metab.

muscle, eff. of exper. shock on glycogen phosphorylation  
in extracts & homogenates in rats. (Hun))

KOVACH, Arisztid; TAKACS, Lajos; KISS, Sandor; ANTAL, Janos

Carbohydrate metabolism in shock; V. Muscular degradation of glycogen in shock. Kiserleres orvostud. 8 no.2:205-214 March 56.

1. Budapesti Orvost. Egyetem Elettani Intezete.

(SHOCK, exper.

eff. on glycogen degradation in musc. of rats in vitro. (Hun))

(GLYCOGEN, metab.

muscle, eff. of exper. shock on degradation in rats in vitro. (Hun))

(MUSCLES, metab.

glycogen, eff. of exper. shock on degradation in rats in vitro. (Hun))

KOVACH, Arisztid.; TAKACS, Lajos.; KISS, Sandor.

Carbohydrate metabolism in shock; VI. Amylase degradation of glycogen in the musculature. Kiserletes orvostud. 8 no.3: 268-276 May 56

1. Budap. Orvost. Egyetem Klettani Intezete.

(GLYCOGEN, metab.

in musc. in normal rats & exper. shock, amylase degradation (Hun))

(MUSCLES, metab.

glycogen, in normal rats & exper. shock, amylase degradation (Hun))

(SHOCK, exper.

eff. on glycogen degradation by amylase in musc. of rats (Hun))

(CARBOHYDRASES

amylase degradation of glycogen in musc. in normal rats & exper. shock (Hun))

TAKACS, Lajos,; KOVACH, Arisztid,; SZABO, T.M.,; KISS, Sandor.

Carbohydrate metabolism in shock; VII. Regeneration of biochemical changes in the musculature. Kiserletes orvostud. 8 no.3:276-282  
May 56

1. Bud. Orvost. Egyetem III. sz. Belk., Eletteni es Orvos. Int.  
(MUSCLES, metab.  
eff. of exper. ischemic shock, & regen. of biochem.  
activities in rats (Hun))  
(SHOCK, exper.  
ischemic, eff. on musc. metab. & regen. of biochem.  
activities in rats(Hun))

KOVACH, Arisztid.; TAKACS, Lajos.; TAKACS-NAGY, Lorant.; ZACHARIN, Gyorgy.; HAMORI, Jozsef.

Regeneration of the working capacity after ischemic shock and of the histological picture of the injured musculature in rats.  
Kiserletes orvostud. 8 no.3:283-288 May 56

1. Bud. Orvost. Egyetem Mlettani Intezete es III. sz. Belk.

(SHOCK, exper.

ischemic, eff. on working capacity & histol. picture of musc. in rats (Hun))

(MUSCLES, physiol.

eff. of exper. ischemic shock on working capacity & histol. picture in rats (Hun))

(WORK, physiol.

capacity, eff. of exper. ischemic shock in rats (Hun))

EXCERPTA MEDICA Sec.18 Vol.1/8 Cardiovascular Aug 57

2493. TAKÁCS L. Budapesti Orvostud. Egijetem III. sz. Belklin. Közl. A szív keringése hypoxiás állapotokban *Cardiac circulation in hypoxaemia* Mag. belorv. Arch. 1955, 9/3 (72—76) Graphs 2 Tables 2

Experiments on dogs. In arterial hypoxia the coronary fraction of the minute volume increases. In traumatic shock the cardiac output markedly diminishes, as well as the coronary circulation; the cardiac fraction of the minute volume increases. In cases of exsiccosis (ligature on the pylorus) the cardiac output is strongly diminished, as well as the coronary circulation; the cardiac fraction of the minute volume is increased. The increase of the cardiac fraction of the min. vol. under different circumstances has a common cause: hypoxia. Sümegi — Budapest (VI, 2, 18)

TAKÁCS, L.

Glycogen breakdown in vitro in the muscle of rats in shock. A. G. B. Kovách, L. Takács, S. Kiss, and J. Antal (Univ. Med. School, Budapest). *Acta Physiol. Acad. Sci. Hung.* 10, 291-302(1956)(in English).—Rats were shocked by immersing hind legs in liquid air under anesthesia. Ischemic shock was induced by ligating the hind legs for 3 to 6 hrs. Muscle exts. were assayed for the rate of glycogenolysis (I) and disappearance of inorg. P (as a measure of phosphorolytic glycogenolysis (II)) in a NaF-NaHCO<sub>3</sub> medium. In muscle from normal animals, I was 3.33 mg./g./20 min. and II was 1.72 mg./g./20 min. In intact muscle from shocked rats, I was 3.95 and II was 2.0 mg./g./20 min. In injured muscle, I was 6.07 and II was 6.07 mg./g./20 min. Injured muscle from ischemic rats showed comparable activity. Nonphosphorolytic breakdown of glycogen was not due to the amylolytic activity of blood nor were differences the result of hydrolysis of glucose-1-phosphate.

I. H. Conenbaver

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KOVACH, A. G. B.; TAKACS, L.; KISS, S.

Phosphorolytic and hydrolytic glycogen breakdown in the muscle of normal rats and of those in shock. Acta physiol. hung. 10 no. 2-4:303-312 1956.

1. Institute of Physiology, University Medical School, Budapest.  
(MUSCLES, metab.

glycogen breakdown by hydrolysis & phosphorylation in normal rats & following exper. shock)

(GLYCOGEN, metab.

musc., breakdown by hydrolysis & phosphorylation in normal rats & following exper. shock)

(SHOCK, exper.

eff. on glycogen breakdown by hydrolysis & phosphorylation in rat musc.)

KOVACH, G. B.; TAKACS, L.; T-SZABO, M.; TAKACS-NAGY, L.; ZACHARIEV, G.;  
HAMORI, J.

Regeneration in the biochemical, functional and histological  
changes found in the muscle of rats after ischaemic shock. Acta  
physiol. hung. 10 no.2-4:313-325 1956.

1. Institute of Physiology, Third Department of Medicine,  
Institute of Chemistry, University Medical School, Budapest.

(SHOCK, exper.

ischemic, eff. on rat musc., biochem., funct. & histol.  
changes & regen. in changes)

(MUSCLES

eff. of exper. ischemic shock in rats, biochem., funct.  
& histol. changes & regen. in changes.)

GOMORI, Pal; TAKACS, Lajos; KALLAY, Kalman; DUDAS, Gizella; BOHANSZKY, Ferencne;  
HACKER, Peter

Effects of isolated cerebral anoxia on pulmonary circulation. *Magy.*  
Tudom. Akad. Biol. Orv. Oszt. Kozl. 8 no.3:269-275 1957.

1. A Budapesti Orvostudományi Egyetem III. sz. Belklinikája.

(CEREBRAL ANOXIA, exper.

eff. of arterial anoxia on pulm. circ. in dogs (Hun))

(BLOOD CIRCULATION

pulm. eff. of exper. cerebral arterial anoxia in dogs (Hun))

GOMORI, Pal; TAKACS, Lajos; KALLAY, Kalman; BOHANSZKY, Ferencne; VECSEY, Geza; KARAI, Antal

Effects of isolated cerebral anoxia on the mass of the spleen. Magy. Tudom. Akad. Biol. Orv. Oszt. Kozl. 8 no.3:277-279 1957.

1. Budapesti Orvostudományi Egyetem III. sz. Belklinikája.

(CEREBRAL ANOXIA, exper.)

eff. of arterial anoxia on mass of spleen in dogs (Hun))

(SPLEEN, physiol.)

eff. of exper. cerebral arterial anoxia on mass in dogs (Hun))

TAKACS, Lajos, az orvostudományok kandidátusa; SZABO, Maria, Technikai munkatárs;  
HORVAT, Vera; TATAR, Erika

Comparative studies on the glycogen content and hydrolytic glycogen  
degradation in striated muscles, heart and uterus in hypoxic states  
(shock, exsiccosis, arterial hypoxia). Magy. Tudom. Akad. Biol. Orv.  
Oszt. Kozl. 8 no.4:353-363 1957.

1. A Budapesti Orvostudományi Egyetem III. sz. Belklinika és Orvosveg-  
tani Intézete.

(GLYCOGEN, metab.

eff. of arterial hypoxia, dehydration & shock on content  
& hydrolysis in striated musc., heart & uterus of exper.  
animals (Hun))

(MUSCLES, metab.

glycogen, eff. of arterial hypoxia, dehydration & shock on  
content & hydrolysis in exper. animals (Hun))

(MYOCARDIUM, metab.

same)

(UTERUS, metab.

same)

(ANOXIA, exper.

eff. of arterial hypoxia on glycogen content & hydrolysis  
in striated musc., heart & uterus of exper. animals (Hun))

.TAKACS, L.; SZABO, M.T.

Comparative studies on striated muscle, heart and uterus in hypoxic states (shock, dehydration, arterial hypoxia) with regard to ATP and glycogen breakdown. (Continued) Card 2.

(SHOCK, eff.

same)

(ADENYLPHOSPHATE, metab.

myocardium, striated musc. & uterus of rats, eff. of  
arterial anoxia. dehydration & shock)

(GLYCOGEN, metab.

same)

EXCERPTA MEDICA Sec 2 Vol 12/4 Physiology Apr 59

1265. METABOLISM IN THE EXTREMITIES IN HYPONIC STATES - Vágtagany-  
agesere hypoxiás állapotokban - Takács L. Orvostud. Egyetem III. sz.  
Beizim., Budapest - KISERL. ORVOSTUD. 1957, 9:5-6 (468-475) Graphs 6  
Tables 1

Metabolism in the hind limbs was studied in 12 dogs in ischaemic shock, dehydra-  
tion and arterial hypoxia. In ischaemic shock the oxygen and glucose uptake of the  
ligatured hind limb and also the production of lactic acid and inorganic phosphate  
increased considerably at first and did not fall below the control values until some  
hours later. In the intact, non-ligatured limb the oxygen uptake was decreased in  
all 3 of the hypoxic states and the anaerobic phase of glucose breakdown prevailed.  
(11, 19)

TAKACS, Lajosden; T-SZABO, Marin

Mechanism of changes in muscular metabolism in shock; studies in exsiccosis and arterial hypoxia. Magyar. belorv. arch. 10 no.2-3:68-71 Apr-June 57.

1. A Budapesti Orvostudományi Egyetem III. sz. Belklinikájának (igazgató: Gomori Pál dr. egyetemi tanár) és Orvosvegytani Intézetének (igazgató: Straub F. Bruno dr. egyetemi tanár) közleménye.

(DEHYDRATION, exper.

eff. on musc. metab. in cats (Hun))

(ANOXIA, exper.

eff. of arterial anoxia on musc. metab. in cats (Hun))

(MUSCLES, metab.

eff. of exper. arterial anoxia 7 Dehydration in cats (Hun))



TAKACS, Lajos; KALLAY, Kalman

Renal circulation in traumatic shock. Magy. belorv. arch. 10 no.4:  
120-123 Aug 57.

1. Budapesti Orvostudományi Egyetem III. sz. Belklinika (Igazgató:  
dr Gomori Pal egyetemi tanár).

(KIDNEYS, blood supply  
circ. in traumatic shock in dogs (Hun))

(SHOCK, exper.  
renal circ. in traumatic shock in dogs (Hun))

~~TAKACS LAJOS~~

Circulation in the extremities in hypoxic states. Magy. belorv. arch.  
10 no.2-3:74-77 Apr-June 57.

1. Budapesti Orvostudományi Egyetem III. sz. Belklinika (Igazgató:  
Gomori Pál dr. egyetemi tanszék) közleménye.

(BLOOD CIRCULATION

peripheral, eff. of exper. ischemia, arterial anoxia &  
dehydration in dogs (Hun))

(ANOXIA, exper.

eff. of exper. anoxia on peripheral circ. in dogs (Hun))

(DEHYDRATION, exper.

eff. on peripheral circ. in dogs (Hun))

TAKACS, L.; SZABO, M.T.

Comparative studies on striated muscle, heart and uterus in hypoxic states (shock, dehydration, arterial hypoxia) with regard to ATP and glycogen content and hydrolytic glycogen breakdown. Acta med. hung. 11 no.1:31-44 1957.

1. With the technical assistance of V. Horvath and E. Tatar, 3rd Department of Medicine and Institute of Medical Chemistry, Medical University, Budapest.

(MYOCARDIUM, metab.

eff. of arterial anoxia, dehydration & shock on adenylypyrophosphate & glycogen metab. in rats.)

(UTERUS, metab.

same)

(MUSCLES, metab.

eff. of arterial anoxia, dehydration & shock on adenylypyrophosphate & glycogen metab. in striated musc. of rats.)

(ANOXIA, eff.

arterial anoxia on adenylypyrophosphate & glycogen metab. in myocardium, striated musc. & uterus of rats.)

(DEHYDRATION, eff.

on adenylypyrophosphate & glycogen metab. in myocardium, striated musc. & uterus of rats.)

~~continued on next page~~

GOMORI, Pal; MUNKACSI, Istvan; NAGY, Zoltan; TAKACS, Lajos; KALLAY, Kalman;  
Technikai munkatársak: VAJDA, Vera; CSAPO, Istvan; TAKACS, Lajos

Significance of the arteriovenose anastomoses of the kidney in  
haemorrhagic hypotonia in traumatic and ischemic shock, and in  
arterial hypoxia. Biol orv kozl MTA 11 no.1:41-60. (EEAI 10:1)

1459  
1. L. tab, Magyar Tudományos Akademia (for Gomori) . 2. A Budapesti  
Orvostudományi Egyetem II. sz. Belklinikája és Anatómiai Intézete.  
(KIDNEYS) (ARTERIES)

EXCERPTA MEDICA Soc.2 Vol.11/4 Physio-biochem-pharm Apr58

1657. CORONARY CIRCULATION IN HYPOXIC STATES - Takács L. 3rd Dept. of Med., Univ. Med. Sch., Budapest - ACTA PHYSIOL. ACAD. SCIENT. HUNG. (Budapest) 1957, 11/1 (55-65) Graphs 2 Tables 7

Experiments were performed on dogs divided into 3 groups. Hypoxia was induced (a) by anoxaemia due to respiration with gas mixture poor in oxygen, (b) by circulatory failure occurring in traumatic shock and (c) by stagnation due to dehydration. The rotameter was included between the carotid artery and ramus circumflexus a. coronariae sin., and the chest was firmly closed. The coronary fraction of the minute volume was found to be increased in anoxaemic hypoxia as well as in stagnant types of hypoxia (in shock or in dehydration) independent of the diminished or increased total minute volume. Hypoxia is the factor common to all 3 conditions, therefore it is postulated as a common cause of vasodilatation of coronaries in groups (a) and (b) and of their unaltered state in dehydration. Good blood supply to the coronaries guarantees a relatively satisfactory heart function in these serious conditions.

Gibiński - Bytom (XVIII, 2, 6)

TAKACS, L.

✓ Mechanism of metabolic changes in muscle during shock. A study of dehydration and arterial hypoxia. L. Takács and M.T. Szabo (Univ. Med. School, Budapest). *Acta Physiol. Acad. Sci. Hung.* 11, 67-73 (1957) (in English). — In the skeletal muscle of the dehydrated rat the glycogen content decreases while the adenosine triphosphate (ATP) level, the phospholytic and the hydrolytic breakdown of glycogen remain unchanged. In rats with arterial hypoxia induced by exposure to 8-10% O<sub>2</sub>-N<sub>2</sub> atm. the ATP and glycogen levels decrease in the skeletal muscle while the phospholytic and hydrolytic breakdown of glycogen remains unchanged. The diminution of phosphorylase and hexokinase activity occurring during shock and the increase of hydrolytic breakdown of glycogen cannot be explained by impaired circulation or hypoxia. O. C. Blum

HUNGARY/HUMAN and Animal Physiology - Metabolism.

Abs Jour : Rei Zhur Biol., No 3, 1959, 12473

Author : Takacs, L.

Inst : Hungarian AS

Title : Metabolism in Extremities in Hypoxic Conditions

Orig Pub : Acta physiol. Acad. sci. hung., 1957, 11, No 2, 197-203

Abstract : Metabolic processes were studied in the extremities of 29 dogs under conditions of ischemic shock, dehydration, and arterial hypoxia. In the blood, taken from the femoral vein and brachial artery, the amounts of sugar (I),  $O_2$ , lactic acid (II), and inorganic P was determined. In ischemic shock during the application of ligatures the maintenance of I (in mg%) dropped from 81 - 82 to 63, and after ligation to 39; the amount of II

Card 1/3

TAKACS, L.; KALLAY, K with the technical assistance of Mrs. F. Bohanszky,  
Mrs. D. Vajda, Mrs. G. Vecsey, A. Karai

Renal circulation in traumatic shock. Acta physiol. hung. 12 no.4:  
373-377 1957.

1. 3rd Department of Medicine, Medical University, Budapest.  
    (SHOCK, exper.  
        eff. on renal circ. in dogs)  
    (KIDNEYS, blood supply  
        eff. of exper. shock on renal circ. in dogs)



TAKACS, Lajos

Metabolism of the extremities in hypoxic states. Kiserletes orvostud  
9 no.5-6:468-475 Oct-Dec 58.

1. Budapesti Orvostudományi Egyetem III. sz. Belklinika.

(ANOXIA, exper.

eff. on carbohydrate metab. in hindleg musc. of dogs (Hun))

(DEHYDRATION, exper.

same)

(SHOCK, exper.

same)

(MUSCLES, metab.

carbohydrates, eff. of anoxia, dehydration & shock in hindleg.

musc. of dogs (Hun))

(CARBOHYDRATES, metab.

musc., eff. of anoxia, dehydration & shock in hindleg musc.

of dogs (Hun))

GOMORI, P.; TAKACS, TAKACS, L.; NAGY, Z.

The effect of humoral factors on renal function in dehydration. I. The effect on renal function of blood from dehydrated animals. Acta med. hung. 11 no.3:365-368 1958.

1. 3rd Department of Medicine, Medical University, Budapest.

(DEHYDRATION, exper.

humoral factor from blood of dehydrated dogs inducing increases of renal filtration fraction in normal dogs)

(KIDNEYS, physiol.

same)

FISCHER, A.; TAKACS, L.; MOLNAR, G.

Parallel determination of arterial and portal circulation of the liver by the bromsulphalein method and with a rotameter. Acta med. hung. 12 no.3-4:255-270 1958.

1. III. Medizinische Klinik der Medizinischen Universität, Budapest.  
(LIVER, blood supply  
circ., arterial & portal, determ. with bromsulphalein  
& rotameter (Ger))

TAKACS, L.; KALJAY, K.; SKOLNIK, J.

Studies on the renal, cardiac and skin fraction of cardiac output in rats with  $RE^{86}$  in ischemic shock and hemorrhage. Acta med. hun. 14 no.4:457-458 '59.

1. 2nd Department of Medicine, University, Budapest.

(HEMORRHAGE exper.)

(SHOCK exper.)

(HEART physiol.)

(KIDNEY physiol.)

(SKIN physiol.)

GOMORI, P.; KOVACH, A. G. B.; TAKACS, L.; FOLDI, M.; SZABO, Gy.; NAGY, Z.;  
WILTNER, W.

Renal blood flow in arterial hypoxia. Acta med. hung. 16 no.1:  
37-42 '60.

1. 3rd Department of Medicine (Director: P. Gomori), Institute of  
Physiology (Director: P. Balint), and 1st Department of medicine  
(Director: I. Rusznyak), University Medical School, Budapest.  
(ANOXIA exper)  
(KIDNEYS blood supply)

GOMORI, P.; KOVACH, A.G.B.; TAKACS, L.; FOLDI, M.; SZABO, Gy.; MAGY, Z.;  
WILTNER, W.

The control of renal circulation in hypoxia. Acta med.hung. 16  
no.1:43-60 '60.

1. 3rd Department of Medicine (Director: P.Gomori), Institute of  
Physiology (Director: P.Balint), and 1st Department of Medicine  
(Director: I.Rusznayak), University Medical School, Budapest.  
(ANOXIA exper)  
(KIDNEYS blood supply)

FISCHER, A.; TAKACS, L.; MOLNAR, G.

Hepatic circulation in arterial hypoxia. Acta med. hung. 16 no.1:  
61-74 '60.

1. 3rd Department of Medicine (Director: P. Gomori), Medical  
University, Budapest.  
(ANOXIA exper)  
(LIVER blood supply)

GOMORI.P.; TAKACS,L.; KALLAY,K.

The effect of isolated cephalic (cerebral) hypoxia and hypotension on pulmonary circulation and spleen volume. Acta med. hung.16 no.1: 75-83 '60.

1. 3rd Department of Medicine (Director: P.Gomori), University Medical School, Budapest.

(CEREBRAL ANOXIA exper)

(INTRACRANIAL PRESSURE)

(LUNGS blood supply)

(SPLEEN blood supply)



GOMORI, P.; KOVACH, A.G.B.; TAKACS, L.; FOLDI, M.; SZABO, Gy.; NAGY, Z.;  
WILTNER, W.; KALLAY, K.

The regulation of cardiac output in hypoxia. Acta med. hung. 16  
no.1:93-98 '60.

1. 3rd Department of Medicine (Director: P.Gomori), Institute of  
Physiology (Director: P.Balint), and 1st Department of Medicine  
(Director: I.Rusznayak), University Medical School, Budapest.  
(ANOXIA exper)  
(HEART physiol)

KALLAY, Kalman; TAKACS, Lajos; NAGY, Zoltan; Technikai munkatársak: Vajda  
Dezső, Karai Antal, Albert Karola

Pulmonary circulation in the states of oligæmia (in bleeding, hemorrhagic, traumatic and ischemic shock and exsiccosis). Biol orv kozl  
MTA 12 no.1/2:127-139 '61.

1. Budapesti Orvostudományi Egyetem II.sz.Belklinikája.

+

TAKACS, Lajos, az orvostudományok kandidátusa; KALLAY, Kalman; SKOLNIK, Józsa;  
Technikai munkatársak: Vajda Dezső, Turcsányi Sándor, Albert Karola,  
Karái Antal

Effect of ischemic shock and acute bleeding on the blood circulation  
in the rat's organs. Biol orv közl MTA 12 no.1/2:149-155 '61.

1. Budapesti Orvostudományi Egyetem II.sz.Belklinikája.

FISCHER, A.; MOLNAR, G.; TAKACS, L.

Blood circulation and oxygen consumption by the liver in experimental cirrhosis in dogs. Acta med.hung. 17 no.1:33-43 '61.

1. II medizinische Klinik (Direktor: Prof. Dr. P.Gomori) und III  
medizinische Klinik (leiter: doz. dr. S.Gero) der medizinischen  
Universität, Budapest.  
(LIVER CIRRHOSIS exper.) (OXYGEN metab.)

TAKACS, L.; KALLAY, K.; with the technical assistance of VAJDA, V.;  
KARAI, A.; ALBERT, K.

Pulmonary circulation in dehydration. Acta med.hung. 17 no.1:53-  
56 '61.

1. Department of Medicine No.2, University Medical School, Budapest  
(director: prof. P.Gomori). (LUNG blood supply)  
(DEHYDRATION exper.)

KALLAY, K.; TAKACS, L.; with the technical assistance of V. Vajda,  
A. Turesanyi, K. Albert and A. Karai

Organ blood flow in unanaesthetized rats and in rats anaesthetized  
with pentobarbital, urethane and chloralose. Acta physiol. hung. 18  
no.4:323-328 '61.

1. Department of Medicine No.2., Medical University, Budapest.

(BLOOD CIRCULATION pharmacol)  
(HYPNOTICS AND SEDATIVES pharmacol)  
(URETHANE pharmacol)  
(PENTOBARBITAL pharmacol)

KALLAY, K.; TAKACS, L.; FENYVESI, T.; with the technical assistance of  
V. Vajda and A. Karai

The effect of epinephrine and nor-epinephrine on pulmonary and  
systemic circulation in the dog, before and after extirpation of  
the thoracic spinal cord. Acta physiol. hung. 18 no.4:329-338 '61.

1. Department of Medicine No.2, Medical University, Budapest.

(EPINEPHRINE pharmacol)  
(NOREPINEPHRINE pharmacol)  
(BLOOD CIRCULATION pharmacol)  
(SPINAL CORD physiol)

TAKACS, L.; KALLAY, K.; HAGY, Z.; Technical assistance of: KARMAI, A.;  
VANDA, V.; ALBERT, K.

Pulmonary circulation in traumatic and ischaemic (tourniquet)  
shock. Acta physiol. hung. 20 no.1:71-76 '61.

1. 2nd Department of Medicine, Medical University, Budapest.  
(SHOCK physiology) (BLOOD CIRCULATION)



KALLAY, Kalman (Budapest VIII., Szentkiralyi u.46); TAKACS, Lajos (Budapest VIII., Szentkiralyi u.46); NAGY, Zoltan (Budapest VIII., Szentkiralyi u.46) With the technical assistance of V. Vajda, A. Karai, K. Albert.

Pulmonary circulation in haemorrhage and haemorrhagic shock. Acta  
physiol Hung 20 no.2:155-164 '61.

1. 2nd Department of Medicine, Medical University, Budapest.

TAKACS, Lajos, dr.; KALLAY, Kalman, dr.; GOMORI, Pal, dr., technikai munkatársak: VAJDA, V.; KUKUCSKA, J.; ALBERT, K.

Effect of synthetic angiotensin on the redistribution of circulating blood in rats. Orv. hetil. 102 no.48:2272-2275 26 N '61.

1. Budapesti Orvostudományi Egyetem, II Belklinika.

(BLOOD CIRCULATION pharmacol)  
(HYPERTENSIN pharmacol)

TAKACS, Lajos; KALLAY, Kalman, dr.

Studies on circulation with Rb-86. Magy. radiol. 14 no.4:223-226 J1  
'62.

1. Budapesti Orvostudományi Egyetem II. sz. Belklinika közleménye.  
(Igazgató: Gomori Pal dr., egyetemi tanár).  
(RUBIDIUM radioactive) (BLOOD CIRCULATION physiol)

KALLAY, K.; TAKACS, L.; with the technical assistance of VAJDA, Vera; KARAI, A.

Effect of the irritation of the bronchial mucosa on pulmonary and systemic circulation. I. Description of the phenomenon. Acta med. acad. sci. Hung. 18 no.1:35-40 '62.

1. Second Department of Medicine (Director: P. Gomori), University Medical School, Budapest.

(BRONCHI physiol) (VASOMOTOR SYSTEM physiol)

TAKACS, L.; KALLAY, K.; KEREKES, E.; with the technical assistance of:  
KARAI, A.; VAJDA, Vera

Effect of the irritation of the bronchial mucosa on pulmonary and systemic circulation. II. Experiments on the underlying mechanism. Acta med. acad. sci. Hung. 18 no.1:41-47 '62.

1. Second Department of Medicine (Director: P. Gomori), University Medical School, Budapest.

(BRONCHI physiol) (VASOMOTOR SYSTEM physiol)

GOMORI, P.; MUNKACSI, S.; NAGY, Z.; TAKACS, L.; KALLAY, K.

Ischaemia and arteriovenous anastomoses of the kidney in shock, haemorrhage, dehydration and arterial hypoxia in dogs. Acta med. acad. sci. Hung. 18 no.1:119-125 '62.

1. Second Department of Medicine (Director prof. P. Gomori) and Institute of Anatomy (Director prof. F. Kiss), University Medical School, Budapest.

(KIDNEYS blood supply) (HEMORRHAGE exper)  
(DEHYDRATION exper) (ANOXIA exper)  
(SHOCK exper)

KALLAY, K.; TAKACS, L.; KERÉKES, E.; with the technical assistance of VAJDA, Vera; ALBERT, Karola; KAHAI, A.

Effect of the irradiation of the bronchial mucosa on the pulmonary and systemic circulation. III. Analysis of the mechanism. Acta med. Hung. 18 no.2:175-187 '62.

1. Second Department of Medicine (Director: Prof. G. Gomori). University Medical School, Budapest.  
(BRONCHII radiation effects)  
(BLOOD CIRCULATION radiation effects)

TAKACS, L.; KALLAY, K.; VAJDA, Vera; with the technical assistance of ALBERT, K.;  
KARAI, A.

The effect of acute arterial hypoxia on the organ blood flow in rats.  
Acta physiol. acad. sci. hung. 21 no.1:87-91 '62.

1. II Department of Medicine, Medical University, Budapest.

(BLOOD CIRCULATION) (ANOXIA experimental)



TAKACS, Laszlo, dr.

Cytodiagnosis of amenorrhea in an outpatient clinic. Magy. noorv.  
lap. 25 no.6:358-360 N '62.

1. A Hajdu-Bihar Megyei Tanacs Rendelointezetenek kozlemenye (Vezeto-  
foorvos: Szent-Kiralyi Istvan dr.).  
(AMENORRHEA) (VAGINAL SMEARS) (SEX HORMONES)

MOUSSONG-KOVACS, E., dr.; TAKACS, L., dr.

Treatment of narcolepsy with imipramin. Ther. hung. 11 no.1:32-34  
'63.

1. Department of Psychiatries (Director: Prof. Gy Nyiro), Medical  
University, Budapest.  
(SLEEP DISORDERS) (IMIPRAMINE) (ELECTROENCEPHALOGRAPHY)

HUNGARY

FISCHER, Antal, TAKACS, Lajos, VARGA, Istvan; Medical University of Budapest, II. Medical Clinic (Budapesti Orvostudományi Egyetem, II. sz. Belklinika).

"Investigation of the Intermediary Metabolism of Drugs by Means of Partial Hepatectomy."

Budapest, Kiserletes Orvostudomány, Vol XV, No 5, Oct 63, pages 555-560.

Abstract: [Authors' Hungarian summary modified] Parallel toxicity tests have been conducted on rats with intact and partially extirpated livers, in order to determine the extent of the role the liver plays in the degradation and excretion of various drugs. No difference has been found with some of the drugs investigated. On the other hand, doses of phenobarbital, urethane, chloralose, penthotal, pentobarbital, chlorpromazine, insulin, coffeine and theophylline were found to be much more toxic in the rats which were partially hepatectomized than in the control animals. This indicates the great importance of the liver in the intermediary metabolism of these drugs. No references.

RESEARCH

FRANK, Lajos, and BALOGH, Ferenc, of the Second Department for Medicine at the University (Orvostudományi Egyetem II. sz. Belklinikája) in Budapest.

Effect of Carbon Dioxide Inhalation on the Circulation of the Anesthetized Rat

Budapest, Acta Physiologica Academiae Scientiarum Hungaricae, Vol. 23, No. 1, 1975, pp. 13-19.

Abstract: English article; authors' English summary. By using the closed-circuit method it has been shown that in rats anesthetized with sodium pentobarbital the inhalation of 3% carbon dioxide from 4 to 10 minutes had no influence on the circulation. In response to 20% carbon dioxide in 4-6 minutes so severe a peripheral vasodilation developed that blood pressure decreased in spite of the increased cardiac output. The vasodilatation was most marked in the liver and intestines (splanchnic area) and least marked in the kidney.

VERECKEI, Istvan, Dr, DEMECZKY, Mihaly (Mrs), Dr, TAKACS, Lajos, Dr; Medical University of Budapest, II. Medical Clinic (Budapesti Orvostudományi Egyetem, II. Belklinika).

"Determination of Thyreotropic Hormone in Plasma."

Budapest, Orvosi Hetilap, Vol 104, No 33, 18 Aug 1963, pages 1555-1556.

Abstract: [Authors' Hungarian summary] The Tsuji-Ogura test for TSH was used by the authors for their investigation. Their experiences with the determination and some modifications, which are considered valuable, are reported. The range of normal values, obtained in their laboratory, and values obtained from samples of three patients after strumectomy are presented. The test is recommended by the authors. 4 Western references.

TAKACS, Lajos, dr.; COMORI, Pal, dr. Technikai munkatársak: ALBERT, Karola;  
KUKUCSKA, Janos; VASJDA, Vera

Effect of aldosterone on the redistribution of circulating  
blood in rats. Orv. hetil. 105 no.16:737-738; 19 Ap'64

1. Budapesti Orvostudományi Egyetem, II. Belklinika.

\*

TABLE 1. *Mean values of the variables measured in the 1000 m time trial*

1-398 44

1. Department of Management Science, University of Illinois at Urbana-Champaign, Urbana, Illinois.

L 1976-66 EWT(1)/FS(v)-3 DD  
ACCESSION NR: AT5024286

HU/2505/64/025/004/0399/0401

AUTHOR: Takacs, L.; Albert, Karola

29  
B71

TITLE: Studies of the mechanism of hypoxic hypotension in the rat

SOURCE: Academia scientiarum hungaricae. Acta physiologica, v. 25, no. 4,  
1964, 399-401

TOPIC TAGS: rat, animal physiology, blood pressure, drug treatment

ABSTRACT: In rats anesthetized with pentobarbital sodium, a drop in blood pressure was found to arise in arterial hypoxia. The hypotensive response was not prevented by sympatolytic, parasympatolytic or ganglionic blocking agents, or by antihistamine and antiserotonine drugs. Upon addition of 5 per cent CO<sub>2</sub> to the hypoxic gas mixture, the decrease in blood pressure was slightly reduced.  
"The authors are indebted to Mrs. V. Vajda, J. Kukuoska and A. Karai for helpful technical assistance." Orig. art. has: 1 table.

ASSOCIATION: Second Department of Medicine, University Medical School, Budapest

SUBMITTED: 00  
NR REF SOV: 000

ENCL: 00  
OTHER: 003

SUB CODE: LS  
JPRS

Card 1/1 SP



VERECKEI, Istvan, dr.; DEMECZKY, Mihalyne, dr.; TAKACS, Lajos, dr.

Clinical significance of the determination of the thyrotropic hormone. Orv. hetil. 106 no.37:1741-1744 12 S'65.

1. Budapesti Orvostudományi Egyetem, II. Belklinika (igazgató: Gomori, Pal, dr.).

L 28992-66

ACC NR: AT6019372

SOURCE CODE: HU/2505/65/027/003/0205/0212

AUTHOR: Takacs, Lajos

ORG: II. Medical Clinic, Medical University of Budapest (Budapesti Orvostudományi Egyetem, II. sz. Belklinika)

TITLE: Effect of adrenalin and noradrenalin on cardiac output and regional blood flow in the rat

SOURCE: <sup>22</sup> Academia scientiarum hungaricae. Acta physiologica, v. 27, no. 3, 1965, 205-212

TOPIC TAGS: rat, hormone, blood pressure, blood circulation, drug effect

ABSTRACT: The effect of adrenalin (100 and 500 µg/kg i.p., or 1.1 µg/kg/min i.v.) and that of noradrenalin (20, 100 and 500 µg/kg i.p., or 1.1 µg/kg/min i.v.) was investigated on the circulation of rats. Blood pressure was measured in the carotid artery, cardiac output was determined by the dye dilution method, and the regional distribution of cardiac output was estimated by Sapirstein's isotope indicator fractionation technique. With the exception of the highest dose used, noradrenalin increased blood pressure without influencing cardiac output. In general, there was no change in regional blood flow while circulatory resistance was increased, especially in the kidney, muscle and skin. In some cases there was an increase also in the coronary fraction of cardiac output and a decrease in the renal fraction. Adrenalin, when given i.p.,

Card 1/2

L 28992-66

ACC NR: AT6019372

3

increased cardiac output and, to a lesser extent, also the blood pressure with a decrease in total peripheral resistance. The blood flow was elevated mainly in the coronaries and muscles with concomitant decrease in vascular resistance. Coronary and skeletal muscle fractions of cardiac output were higher while the renal fraction was lower than in the untreated controls. I.v. injection of adrenalin resulted in an increase in blood pressure without any effect on cardiac output. Vascular resistance was elevated in the kidney and skin, and an increase was noted in the coronary and skeletal muscle fraction of cardiac output. V. Vajda, Karola Albert and J. Kukucaka gave technical assistance. Orig. art. has: 1 table. [Orig. art. in Eng.] [JPRS]

SUB CODE: 06 / SUBM DATE: 09Jun64 / ORIG REF: 002 / OTH REF: 011

Card 2/2

BLG

L 30057-66  
ACC NR: AT6020341 SOURCE CODE: HU/2505/65/028/004/0373/0377

AUTHOR: Takacs, Lajos 21  
ORG: Second Department of Medicine, University Medical School, Budapest  
(Orvostudományi Egyetem II. sz. Belklinika) B+

TITLE: Effect of <sup>22</sup>hemorrhage on the circulation of various organs in the nephrectomized rat

SOURCE: Academia scientiarum hungaricae. Acta physiologica, v. 28, no. 4, 1965, 373-377

TOPIC TAGS: rat, blood circulation, cardiovascular system

ABSTRACT: Cardiac output and the circulation of various organs were studied in normal, sham-operated and nephrectomized rats. In normal and sham-operated rats subjected to blood loss, the coronary, "lung" and carcass fractions of cardiac output increased. While in the normal and sham-operated group this shifting occurred at the expense of the renal fraction, after removal of the kidneys the decrease in the splanchnic fraction became significant. V. Vajda, J. Kukucska and Karola Albert gave technical assistance. Orig. art. has: 1 table. [Based on author's Eng. abst.] [JPRS]

SUB CODE: 06 / SUBM DATE: 29Jan65 / ORIG REF: 005 / OTH REF: 004

Card 1/1 90

HUNGARY

SKOLNIK, Jozsa, Dr. TAKACS, Lajos, Dr. SZENDE, Eva, Dr; Medical University of Budapest, II. Medical Clinic (Budapesti Orvostudományi Egyetem, II. Belklinika).

"In Vitro Oxygen Uptake by Kidney, Brain and Liver Slices in Hypoxia."

Budapest, Orvosi Hetilap, Vol 108, No 8, 19 Feb 67, page 355.

**Abstract:** [Authors' Hungarian summary] Under in vitro conditions, the oxygen uptake by the renal cortex underwent a greater decrease, under hypoxia, than did the cerebrocortical and liver slices. 1 Western reference..

1/1

Dr. STANISLAV, Gyorgy, Dr. REHAY, Henri, Dr. TAKACS, Lajos, Dr.  
Journal of the Society of Rheumatology (director: STANISLAV, Gyorgy, Dr, professor)  
Journal of Rheumatology (director: STANISLAV, Gyorgy, Dr, professor)  
Journal of Rheumatology (director: STANISLAV, Gyorgy, Dr, professor)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754720010-4

and in Nagy, Magyar Traumatologia, Orthopaedia es Helyreallito Sebeszet, Vol X, 1961, Feb 67, pages 50-56.

Summary: [Authors' English summary modified] Respiratory function studies, blood gas analyses and morphological examinations indicate that ventilation and gas exchange disorders following paradoxical thoracic movement should be attributed primarily to atelectasia and to the decreased respiratory surface produced by hemorrhages. The "Pendelluft" phenomenon could not be demonstrated either immediately after surgery or during the following days. It is concluded that any role of this presumed phenomenon can definitely be excluded in the paradoxical movement of the rabbit. On the basis of clinical experiences it is assumed that, in ventilation and gas exchange disorders secondary to paradoxical movement in man, similar factors play a role to those found in the experiments reported. 2 Hungarian, 5 Western references.

1 2 3

Since the presence of Spriestain in rabbits and dogs, it was shown that a retrograde thoracic movement has no special effect on the blood circulation in these two species. A demonstration of the circulatory effect of the thoracic movement on mediastinal flutter, as proposed in the literature, was not possible. Since the present experimental results tend to disprove the existence of this mechanism, its presence in man is also disputed. Further references.

TAKACS, Laszlo, okleveles gepeszmernok

On the control of the preparation and economy of production plans.  
Ujit lap 12 no.13:24 12 J1 '60.

TAKACS, Laszlo, okleveles gepeszmernok, szamitasi mernok.

Some questions of tropical insulation of electric motors.

Elektrotechnika 56 no.11/12:495-499 N-D 63.

1. Villamosgep- es Kabelgyar, Budapest, X., Gyomroi ut 128.

TAKACS, Laszlo, dr.

Gracidin intoxication ... pondex psychosis. (Data on the psychopathological symptoms caused by anorexigenics). Orv. hetil. 106 no.34:1611-1613 22 Ag'65.

1. Budapesti Orvostudományi Egyetem, Pszichiatriai Klinika (igazgató: Nyíró, Gyula, dr.).



TAKA P., J. L. L., I. Sziklai munkatársak: VAJDA, V.; KUKUCSKA, J.; ALBERT, K.

Effect of hemorrhage on the blood circulation in the organs  
of rats following removal of the kidneys. Orv. hetil. 106 no.36:  
1692-1694 5 S'65.

I. Budapesti Orvostudományi Egyetem, II. Belklinika (igazgató:  
Gamori, Pál, dr.).

TAKACS, Mihaly

Synthetic bases for suppositories and salves. Gyogyszeresz 9 no.7:  
121-124 1 July 54.

(OINTMENTS

bases, synthetic)

(SUPPOSITORIES

bases, synthetic)

COUNTRY : Hungary H-17  
 CATEGORY :  
 ABS. JOUR. : AZKhim., No. 21 1959, No. 75809  
 AUTHOR : Zuber, L., Szasz, G., Elze, G., and Takacs, M.  
 J. P. : No. given  
 TITLE : On the Stability of the Color of Standard Solutions Prepared According to the Fifth Edition of the Hungarian Pharmacopoeia  
 ORIG. PUB. : Acta Pharm Hung, 28, No 3, 105-119 (1958)  
 ABSTRACT : The authors have investigated the stability of standard solutions used in colorimetric analysis and containing  $\text{CoCl}_2 \cdot 6\text{H}_2\text{O}$  (60 mg/ml),  $\text{FeCl}_3 \cdot 6\text{H}_2\text{O}$  (45 mg/ml), and  $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$  (60 mg/ml). It has been found that: (1) Changes in the concentration of chloride ion affect the color of the solution and the use of  $\text{FeCl}_3$ , which does not contain free HCl is therefore recommended; the concentration of the HCl used in dilution should be 1%. (2) The standard solutions must be stored

3480: 1/2

ABST. JOUR. : REKHEB., No. 21 1959, No. 75809

AUTHOR :  
 INST. :  
 FIELD :

ORIG. PUB. :

ABSTRACT : in sealed ampules. (3) The color of the solutions in the ampules did not change noticeably during storage under daylight illumination; however, storage in the dark is recommended. (4) No chemical changes were observed to have taken place in solutions stored for a period of 1 yr. (5) Temperature variations affect only  $\text{FeCl}_3$  solutions; the change in the latter is reversible and the thermostating of the solutions at  $20^\circ (\pm 3^\circ)$  is recommended in comparison tests.

S. Rozenfel'd

CARD: 2/2

230

COUNTRY : HUNGARY H  
 CATEGORY : Chemical Technology. Chemical Products and Their  
 Application. Pharmaceuticals. Vitamins. Antibio\*  
 ABS. JOUR. : RZhKhim., No 17, 1959, No. 61853  
 AUTHOR : Szasz, G; Khin, L.; Takacs, M.; Zacsko, M.  
 INSTITUTE : -  
 TITLE : Separation of Medicinal Mixtures by the Chromato-  
 graphic on Paper Method.  
 ORIG. PUB. : Acta pharmac. hung., 1958, 28, No 5-6, 219-222  
 ABSTRACT : Through investigations it was established that  
 certain compounds, for example amidazophen (I),  
 acetylsalicylic acid (II), luminal (III), phenace-  
 tine (IV), giving with the Partridge's solvent  
 (butanol-water-glacial acetic acid, see Biochem.  
 J., 1948, 42, 238) very close values of  $R_f$ , sepa-  
 rate well of salts. Values of  $R_f$  for I and II are  
 0.89 and 0.94 respectively, if, however, a drop,  
 of  $H_3PO_4$  or HCl is added to I then it's  $R_f$  chan-  
 ges considerably (up to 0.41 and 0.54). Based on  
 \*tics.

Card: 1/2

TAKACS, Marta

"Psychology of industrial performance" by J.A.C. Brown. Reviewed  
by Marta Takacs. Magy pszichol szemle 14 no.4:500-501 '62.

TAKACS, O.; TOMITY, I.T.

Analysis of the body temperature-lowering effect of hypoxia and hypercapnia.  
Acta physiol. hung. 13 no.4:355-364 1958.

1. Physiologisches Institut und anatomisches Institut der Medizinischen  
Universitat, Szeged.

(HYPOTHERMIA, experimental

prod. by hypoxia \_ hypercapnia in rats, mechanism (Ger))

(CARBON DIOXIDE, in blood

hypercapnia & hypoxia causing hypothermia in rats, mechanism  
(Ger))

(OXYGEN, in blood

hypoxia & hypercapnia causing hypothermia in rats, mechanism  
(Ger))

SZORADY, Istvan, dr.; TOTH, Gyorgy, dr.; TAKACS, Odon, dr.

Glutarimide therapy of asphyxia neonatorum. Orv.hetil. 101 no.52:  
1850-1853 25 D'60.

1. Szegedi Orvostudományi Egyetem, Gyermekklinika és Elettani  
Intézet.

(ASPHYXIA NEONATORUM ther)  
(ANALEPTIC ther)



L 9380-66 EWT(1)/FS(v)-3

DD

ACC NR: AT5028093

SOURCE CODE: HU/2505/65/028/001/0077/C088

AUTHOR: Madarasz, I.; Obal, F.; Vicsay, M.; Takacs, O.

37

ORG: Institute of Physiology, University Medical School, Szeged

TITLE: Analysis of the vegetative and EEG responses to hypoxia

B+1

SOURCE: Academia scientiarum hungaricae. Acta physiologica, v. 28, no. 1, 1965, 77-88

TOPIC TAGS: hypoxia, EEG, conditioned reflex, respiratory reaction, rabbit

ABSTRACT: Eight rabbits weighing between 5 and 6 kg each were subjected to inhalation of air containing 6 to 8% oxygen for the purpose of clarifying how the early bioelectrical manifestations accompanying the development of conditioned reflexes are altered by the vegetative changes elicited by hypoxia. Bioelectrical activity was recorded with embedded electrodes, using leads from the cerebral cortex, the hippocampus, and occasionally from other subcortical structures. Respiration was registered by means of thermistors. The animals were conditioned to a visual stimulus during exposure to low-oxygen (6% to 8%) atmospheres. The typical sinusoidal rhythm appears in the hippocampus during the first reinforcement, and the respiration curve becomes flat. During subsequent reinforcements, the hippocampus shows a variegated electrical pattern, with slow (5 to 8 cps) waves alternating with high, fast waves. When the conditioned reflex is evoked, the slow sinusoidal pattern recurs in the hippocampus, fol-

Card 1/2

L 9380-66

ACC NR: AT5028093

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lowed by similar activity in the hypothalamic and the occipital leads. Respiration increases in response to the conditioned visual stimulation, the onset of increased oxygen consumption being accompanied by appearance of 30-cps frontal lead activity. The slow cortical waves observable in the course of subsequent hypoxic periods appear to be the result of conditioning. The first 100 sec after elicitation of the reflex are marked by bursts of high, fast waves interspersed with the basal activity. These bursts (also thought to result from conditioning) consist of particularly conspicuous electrical activities of the hypothalamus and the hippocampus. The characteristic hippocampic sinusoidal waves appear for only a few seconds after presentation of the conditioned stimulus. After that, desynchronization sets in and respiration shows conditioned changes. The sudden increase in metabolic rate is accompanied by an orientation reaction, with motor, respiratory, and EEG signs. Orig. art. has: 13 figures. [BM]

SUB CODE: 06/ SUBM DATE: 04Sep64/ OSOV REF: 001/ OTH REF: 013/ ATD PRESS:

4159

Card 2/2

L 15518-66

ACC NR: AT6007370

SOURCE CODE: HU/2505/65/026/00X/0006/0006

AUTHOR: Madarasz, I.; Vicsay, Margit; Takacs, O.; Obal, F.

ORG: Institute of Physiology, Medical University of Szeged (Szegedi Orvostudományi Egyetem, Elettani Intézet)

TITLE: Reflex responses to hypoxia in young animals. [This paper was presented at the 29th Meeting of the Hungarian Physiological Society held in Szeged from 2 to 4 July 1964]

SOURCE: Academia scientiarum hungaricae. Acta physiologica, v. 26, Supplement, 1965, 6

TOPIC TAGS: hypoxia, rat, dog, conditioned reflex, biologic metabolism, nervous system

ABSTRACT: In a continuation of earlier experiments, the changes in the reduction of the metabolic rate and the conditioned reflex response to hypoxia have been studied in rats and dogs 0-72 days old. It was found that up to about 20 days of age, the animals respond to repeated episodes of hypoxia with almost no change in O<sub>2</sub> consumption and the conditioned reflex manifests itself with a decrease in O<sub>2</sub>, i.e. the change is in the same direction as in the case of the unconditioned response. At  
Card 1/2

L 15518-66

ACC NR: AT6007370

around 20 days, O<sub>2</sub> consumption oscillates in response to the conditioned stimulus, it is often biphasic, a decrease followed by an increase. After 20 days, the opposite conditioned reaction becomes predominant consisting in an increase in O<sub>2</sub> consumption and it becomes more marked with advancing age. The results led to the conclusion that, parallel with the ontogenetic development of the nervous system, the vegetative balance of the organism is ensured to an increasing extent by a higher, corrective central nervous regulation. [JPRS]

SUB CODE: 06, 05 / SUBM DATE: none

Card 2/2

SZORADY, Istvan; KOLTAY, Miklos; DOMBRADI, Geza; TAKACS, Odon

Studies on electrolytes in artificial hibernation. Kisevletes  
orvostud. 13 no.4:337-344 Ag '61.

1. Szegedi Orvostudományi Egyetem Gyermekklinika és Élettani  
Intézete.

(HIBERNATION ARTIFICIAL metab) (ELECTROLYTES metab)

MADARASZ, L.; OBAL, F.; VICSAY, Margit; TAKACS, O.

Analysis of the vegetative and EEG responses to hypoxia. Acta  
physiol. acad. sci. Hung. 28 no.1:77-88 '65.

1. Institute of Physiology, University Medical School, Szeged.  
Submitted September 4, 1964.

1 45496-66 TTPB DD

ACC NR: AT6033360

SOURCE CODE: HU/2505/65/026/01-/0182/0182

AUTHOR: Madarsz, I.; Obal, F.; Vicsay, Margit; Takacs, O. 24

ORG: Institute of Physiology, Medical University of Szeged (Szegedi Orvostudományi Egyetem, Elettani Intézet) 241

TITLE: Autonomic and EEG responses evoked by hypoxia [Paper presented at the symposium of the Hungarian Physiological Society held in Budapest from 2-3 July 1963] 2

SOURCE: Academia scientiarum hungaricae. Acta physiologica, v. 26, no. 1-2, 1965, 182

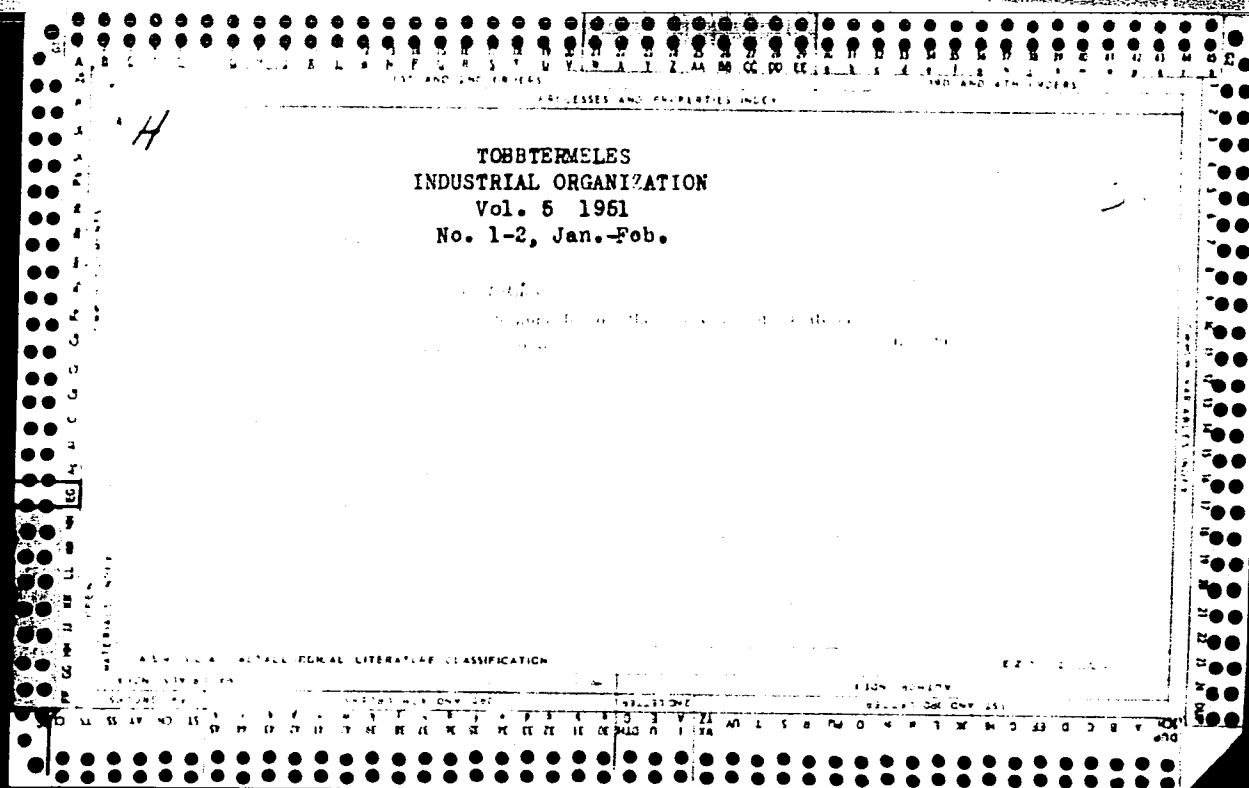
TOPIC TAGS: EEG, hypoxia, autonomic nervous system, electrophysiology

ABSTRACT: In different animal species, the conditioned autonomic and EEG responses evoked by indifferent (optic and acoustic) stimuli coupled with inhalation of air with 6-10 per cent oxygen content have been studied by recording the oxygen consumption, body temperature, respiration and electrical activity of the neocortex and of different subcortical structures. The early signs of the autonomic conditioned response and the bioelectrical manifestations associated with it have been analyzed. The autonomic responses were found to be identical with or reciprocal to the effect of the unconditioned, hypoxic stimulus. The EEG patterns were indicative of the conditioned character of both types of autonomic response. [Orig. art. in Eng.] [JPRS]

SUB CODE: 06 / SUBM DATE: none

Card 1/1

0920 1382







1951, p.

Standardization as a means to increase the level of productivity in factories. p. 97.  
Vol 5, no. 7/8, July/Aug. 1951. SZASZVANYOSIUS. Budapest, Hungary.

So: Eastern European Accession. Vol 5, no. 4, April 1956

TAKACS, Pal

Order No.3/1962. (Sz.K.3.) MSzH issued by the President, Hungarian Bureau of Standards on putting into effect, modification, and abrogation of the Standards of the Hungarian People's Republic. Szabvany kozl 14 no.3:49-51 Mr '62.

1. Magyar Szabvanyugyi Hivatal elnoke.

TAKACS, Pal

Order No.5/1962. (SzK.5)MSzH issued by the President of the Hungarian Bureau of Standards on the putting into effect, modification, and abrogation of the National Standards of the Hungarian People's Republic. Szabvany kozl 14 no.5:97-102 My '62.

1. Magyar Szabvanyugyi Hivatal elnoke.

TAKACS, Pal

Order No.5/1962.(Sz.K.5)MSzH issued by the President of the Hungarian Bureau of Standards on the putting into effect, modification, and abrogation of the National Standards of the Hungarian People's Republic. Szabvány kozl 14 no.6:121-124 Je '62.

1. Magyar Szabványügyi Hivatal elnöke.

TAKACS, Pal

Order No.10/1962.(Sz.K.10) MSzH issued by the President, Hungarian Patent Office, on putting into force, modification, and abrogation of the National Standards of the Hungarian People's Republic. Szabvany kozl 14 no.10:217-221 0 '62.

1. Magyar Szabvanyugyi Hivatal elnoke.

TAKACS, Pal

Order No.11/1962. (SzK.11.) MSzH issued by the President, Hungarian Office of Standards, on the putting into force and modification of the Hungarian People's Republic National Standards. Szabvany kozl 14 no.11:241-246 N '62.

1. Magyar Szabvanyugyi Hivatal elnoke.

TAKACS, Pal

Pal Takacs, president, National Bureau of Standards, answers  
the questions of technologists. Musz elet 17 no.19:3  
13 S '62.

1. Orszagos Szabvanyugyi Hivatal elnoke.



TAKACS, Pal

Order No.1/1963. (Sz.K.3.) MSzH issued by the President, Hungarian Bureau of Standards, on putting into force, modification and abrogation of the Hungarian People's Republic Standards. Szabvany kozl 15 no.1:1-3 Ja '63.

1. Magyar Szabvanyugyi Hivatal elnoke.

TAKACS, Pal

Order No.2/1963. (Sz.K.2.)MSzH issued by the President, Hungarian Bureau of Standards, on putting into force modification, and abrogation of the Hungarian People's Republic Standards. Szabvany kozl 15 no.2:28-31 F '63.

1. Magyar Szabvanyugyi Hivatal elnoka.

TAKACS, Pal

Order No.3/1963.(Sz.K.3.)MSZH issued by the President, Hungarian Bureau of Standards, on putting into effect, modification as well as abrogation of the National Standards of the Hungarian People's Republic. Szabvany kozl 15 no.3:49-53 Mr '63.

1. Magyar Szabvanyugyi Hivatal elnoka.

TAKACS, Pal

Order no.4/1963. (Sz. K. 4.) MSZH, issued by the President,  
Hungarian Bureau of Standards, on the modification and abrogation  
of the Hungarian People's Republic National Standards. Szabvány  
kozl 15 no.4:73-74 Ap '63.

1. Magyar Szabványügyi Hivatal elnöke.

TAKACS, Pal

Order no.5/1963. (Sz. K.5.) MSZH, issued by the President, Hungarian Bureau of Standards, on the modification and abrogation of the Hungarian People's Republic National Standards. Szabvany kozl 15 no.5:97-103 My '63.

1. Magyar Szabvanyugyi Hivatal elnoke.

TAKACS, Pal

Order No.6/1963. (Sz.K.6.) MSzH issued by the President,  
Hungarian Bureau of Standards, on putting into force, modification  
and abrogation of the Hungarian People's Republic Standards.  
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TAKACS, Pal

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1. Magyar Szabványügyi Hivatal cikke.